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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,742

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EXAMINER

CASCA, FRED A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

06/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,742	Applicant(s) MATSUKI, TORU	
	Examiner FRED A. CASCA	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (US 2006/0094432 A1) in view of Leonard (US 2006/0068826 A1).

Referring to claim 1, Chang discloses a method for testing a handover function between cells covered by the base station radio apparatuses in a mobile communication system (abstract and Fig. 1), the mobile communication system at the least including a mobile station (Fig. 1), base station radio apparatuses that perform communication with the mobile station and a radio base station control apparatus that controls transmission powers for the base station radio apparatuses (Fig. 1), wherein the method comprising:

a step of calculating a difference between levels of reception fields for the base station radio apparatuses that cover the cells for which the handover test of the mobile terminal is to be performed (Paragraph 16 and 38, “measuring signal strength of signals received by a mobile station from an active base station and comparing the measured signal strength of the active base station with a first threshold value”); the difference between the levels of the reception fields of which is equal to or smaller than the threshold value (Par. 37, “compares the measured signal strength power P(A) of the active base station with a plurality of threshold values”) and a step of

performing the handover function test between the cells covered by the base station radio apparatuses (Par. 22, 37, “determining if the mobile station needs to hand off to another base station”).

Chang does not specifically disclose controlling transmission powers of the base station radio apparatuses so that a difference is equal to or smaller than a predetermined threshold value in the format claimed.

Leonard discloses a wireless network service using an initial threshold to determine whether a signal received from a cellular device is of sufficient strength to warrant further processing, implementing a power controller of a base station, where the power controller includes an outer loop power control and an inner loop power control, and a outer loop power control determining the strength of the received signal and comparing it to an different threshold values (abstract and paragraphs 8-9, 24 and 27, “wireless network service utilizes an initial threshold to determine whether a signal received from a cellular device is of sufficient strength”, “a power controller of a base station, where the power controller includes an outer loop power control and an inner loop power control”, “ The outer loop power control determines the strength of the received signal and compares it to an initial threshold”).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Chang by incorporating the teachings of Leonard in the format claimed, for the purpose of providing an efficient handover method.

Referring to claim 2, the combination of Chang/Leonard discloses a method according to claim 1, and further disclose at the step of controlling transmission powers, the transmission

power of the base station radio apparatus for which the difference has been calculated and for which the level of the reception field is high is controlled, so that the difference is equal to or smaller than the predetermined value (Leonard, paragraphs 8-9, 24 and 27).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Chang by incorporating the teachings of Leonard in the format claimed, for the purpose of providing an efficient handover method.

Referring to claim 3, the combination of Chang/Leonard disclose a method according to claim 1 or 2, wherein the method further comprises a step of measuring reception field levels of the mobile terminal (inherent); a step of notifying the radio base station control apparatus of the measured reception field levels (inherent); a step of calculating a difference between the reception field levels that are notified (Leonard, paragraphs 8-9, 24 and 27, Chang, paragraphs 16, 22 and 26); a step of comparing a difference in the thus calculated reception field levels with the threshold value; a step of, when the difference is greater than the threshold value, calculating an adjusted value to control transmission powers of the base station radio apparatuses, so that the difference is equal to or smaller than a predetermined threshold value; and a step of employing the adjusted value to control the transmission powers of the base station radio apparatuses (Leonard, paragraphs 8-9, 24 and 27, Chang, paragraphs 16, 22 and 26).

Referring to claims 4 and 5, claims 4 and 5 recite features analogous to the features of claims 1 and 2 (as rejected above). Thus the combination of Chang/Leonard discloses all elements of claims 4 and 5 (please see the rejection of claims 1 and 2 above).

Referring to claim 6, claim 6 recites features analogous to the features of claim 1 (as rejected above). Thus the combination of Chang/Leonard discloses all elements of claim 6 (please see the rejection of claim 1).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617